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ABSTRACT

The program development guide provides general information about Project ESURG (Exemplary Systems Unique for Rural Gifted), a program serving approximately 365 intellectually gifted students (grades K through 8) within a 4 county, 500 square mile area of Nebraska. The principle of gradually implementing a gifted education program is explained in the introductory chapter. Chapter 1 explains the four year program plan: year 1--direct classroom servie by ESURG staff through identification of gifted students, presentation of direct instruction at 26 sites, and presentation of a graduate level survey course in gifted education; year 2--local teacher internship within the classroom which provided 15 "contact teachers" with experience and graduate credit for sharing teaching and managerial responsibilities for the ESURG class in their school: year 3--local assumption of project with ESURG staff members providing support to local programs through monthly meetings, periodic visitations, plus frequent telephone calls; and year 4--maintenance at local level with current information and inservice provided by ESURG central staff. Chapter 3 describes principles of the differentiated curriculum, vertical and horizontal enrichment, and teaching strategies (such as use of "boundary breakers" as questions and guided fantasies). Ways to foster critical thinking are discussed in the fourth chapter. Chapter 5 provides aids to help the teacher's own personal assessment. The final chapter gives principles for encouraging creative production such as combining convergent and divergent thought. (DB)

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Project ESURG

Exemplary Systems Unique for Rural Gifted

Funded by ESEA Title IV-C

Program Development Guide

by

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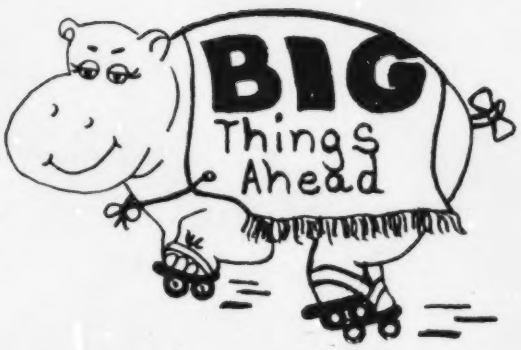
INTRODUCTION



--INTRODUCTION--

Establishing, Maintaining and Evaluating
a Program for Gifted Students

? What is Gifted Education?

Gifted Education is composed of a combination of philosophies, theories, strategies and activities which are designed to foster the growth and development of high ability students.

? How are Gifted Programs started?

1) Some schools feel so strongly about the need to do something for gifted students that they get a few good ideas and begin a program. This method allows for a lot of spontaneity, flexibility and growth.

2) Other school systems feel the need to gain some expertise in Gifted Education, plan curricular offerings, and design "managerial" flow charts. This method is educationally sound, involves many staff members and is truly responsive to local needs.

3) Still other schools feel that **adopting** an established program which can be modified at a later date is the way to begin. This method is quick; materials are usually based on sound research; the program provides a reasonable starting place.

As required by Title IV-C guidelines, Project ESURG was created using the "Think it Through" philosophy. However, elements from the other two categories emerged as the project expanded and became the responsibility of local districts.

What do successful gifted programs have in common?

There are several key factors which long-lasting, effective gifted programs share. In an effort to provide more than just a general checklist of important components, this section includes factors which have actually been experienced by participants in Project ESURG. (They are listed randomly; importance could vary from site to site.)

Remember!

1) At least 3/4 of the following groups truly want a program:

    a) Administration

    b) Community (Parents, School Board)

    c) Teachers

    d) Students

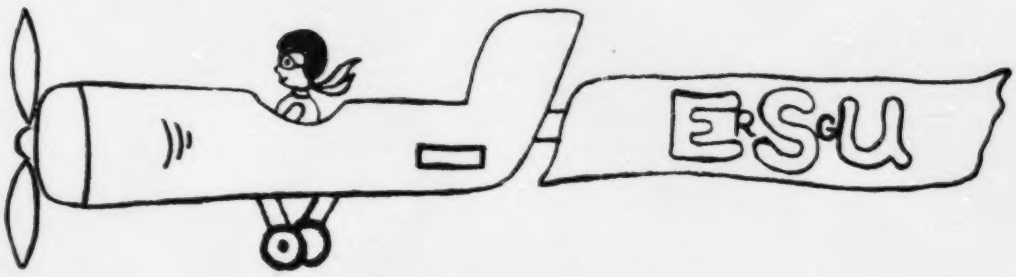
Gifted Education is DYNAMIC EDUCATION. It also is a highly "political" field because it addresses a minority group. Active participation and support must occur at some point within a school district for a program to succeed.

2) Program participants are dedicated to providing appropriate educational experiences for high ability students. Those who think in terms of curricular modification, individualization and evaluation procedures are developing a solid program for gifted students.

3) Participating teachers have a true interest in helping gifted students to grow. The characteristics of a "teacher of the gifted" are the same as any good teacher with one important addition: dedication to the cause. Gifted Education requires more than normal effort from staff. True involvement requires the best a teacher has to give--emotionally, physically and intellectually. The rewards are well worth the effort!

Happy Endings

PROJECT ESURG



A RURAL MODEL

Chapter 2

What is Project ESURG?

- ESURG stands for Exemplary Systems Unique for Rural Gifted. The program is designed to provide enrichment for intellectually and/or academically gifted students in grades 3-8. Based at the Educational Service Unit #2 in Fremont, Nebraska, the project was funded for 3 years by Title IV-C of the Elementary and Secondary Education Act.

Project ESURG was designed to help rural schools develop and maintain Gifted Education programs for students in grades 3-8. The model was designed around the following hypotheses:

A) "...As teachers gain educational expertise in dealing with gifted students, they will assume more responsibility for making sure appropriate activities are provided."

B) "...As gifted students and parents participate in differentiated educational experiences, they will support the Project and maintain Gifted Education programs in their schools."

Both beliefs have been verified clinically and statistically. (For statistical data, please refer to the separate document, "Project ESURG Evaluation Report, 1979-1980".)

?

What is the Project ESURG service model?

The project was designed to serve a variety of schools within a 4 county, 500 square mile area. Activities were provided which would allow the locus of responsibility for gifted programming to gradually shift from project personnel to the staff in the local schools.

In overview, the project included a "four-plus" year plan:

Year 1	Direct classroom service by ESURG staff
Year 2	Local teacher internship within classroom
Year 3	Local assumption of the project
Year 4, 5, etc.	Maintenance at local level; current information, inservice provided by ESU #2.

4+

1

Year One--Awareness

Each rural community in our area is unique. Towns within twenty miles of one another may differ totally in ethnic makeup, religious preference and community economic priorities. Local pride, independence and a sense of political individuality are the values which have maintained the one and two-room "Class I" schools in the area. The ESURG staff was therefore presented with a special challenge: to meet the needs of 60 gifted junior high students in a consolidated school as well as the gifted "isolate" in the country school.

The first year, therefore, was dedicated to building

AWARENESS, INTEREST AND SUPPORT

among all participants.

ESURG staff members averaged 800 miles per week of travel between sites within the area in the performance of these tasks:

--Identification of 365 students

--Presentation of direct instruction, 1 hour per week, 26 sites (13 each staff member)

--Development of differentiated units

--Presentation of graduate level survey course in Gifted Education

--Hosting workshops--nationally known speakers in Gifted Education

--Presentation of inservice sessions

--Conducting parent awareness sessions

--Performance of professional duties--attending meetings, dissemination, etc.

--Performance of grant-related activities.

2 Year Two--On-Site Training

At the end of the first year, participating parents and students strongly recommended that the project be continued. Teachers were less enthusiastic.

It was determined that inservice alone was not sufficient training to build teacher confidence. Area teachers felt:
1) "Gifted is too specialized and requires too much work";
2) "Let the ESURG teachers continue teaching our gifted classes".

At this time the project began its "Contact Teacher" program.

ESURG staff provided direct services only to those schools which could supply a teacher for training in Gifted Education. The fifteen "Contact Teachers" received 3 hours of graduate credit for sharing teaching and managerial responsibilities for the ESURG class in their school. Generally, this meant that the ESURG teacher provided direct demonstration teaching and curricular differentiation for the first semester with the Contact Teacher assuming this role for second semester.

With this program firmly in operation, ESURG staff members refined the curriculum design and continued to perform all tasks previously itemized.

3 Year Three--Local Assumption of Project

As a result of the direct, on-site training program Contact Teachers were able to assume full responsibility for local classes this year. Monthly meetings for all Contact Teachers, periodic visitations plus frequent telephone calls and memos allowed ESURG staff members to support the local programs. The policy of the project was:

"If a Contact Teacher asks for help we'll go; if not, we'll provide materials and moral support".

The project staff believed that the real test of the model would come during the third year.

As local sites assumed responsibility for ESURG classes, many key questions concerning the strength of the program were answered.

1) Does the model allow for flexibility so much needed in our diverse rural communities? Yes.

--The model allowed for flexibility. The project initially used "pull-out" classes, offering special activities for one hour per week in each participating school. Students from one- or two-room country schools were transported by parents to larger schools to participate in sessions. A ratio of 15 to 1 was encouraged as was a multi-age mixture. As the project became a local responsibility, models, schedules and types of experiences varied from site to site. However, each school maintained uniform policies for identifying students, testing, and differentiating curriculum. (Therefore, a student moving from 1 ESURG program to another could automatically become a member of the new class, receive the same strategies and report cards. Topics differed.)

2) How successful was the "Internship"?

--The "Internship" or on-site practicum, appeared to provide valuable experience to Contact Teachers in both curricular and administrative areas. There were a minimum number of calls for class-room assistance--one for help in teaching the first class of the year. The rest of the calls requested the ESURG staff as resource personnel or as guests on special days.

3) What is the "Achilles Heel" of the model?

--It appears that the strength of the project is also the weakness. The on-site practicum allowed for the development of effective Contact Teachers. However, only one or two teachers per building were directly involved. In cases where Contact Teachers have left the district, the gifted program has been endangered if not terminated.

4) Is the program strong enough to survive the budget cuts facing our educational systems?

--The programs seem to be surviving budget cuts. Parental involvement in board meetings seems to be the most important factor in maintenance of gifted programs.

What "Spin-Off" Programs emerged from the original model?

- Two Interest Fairs were hosted by the ESURG staff. Designed as a convention for parents, students and Contact Teachers. Offerings included career-related information; "How-To" sessions; unique topics; parent awareness; etc.
- Two "Creativity-Through-The-Visual-Arts-Programs" were developed; K-5, one 6-8.

- Two "Honors" Social Studies courses emerged; grades 7 and 8.
- One ESURG class was scheduled one period daily for 9 weeks.
- One class was offered daily all year during a 20-minute "Home Room" period.
- One class met as a group first semester; conducted independent study second semester with personal conferences.
- ESURG staff members conducted all-day, monthly sessions for students from one-room country schools.

How are ESURG students identified?

Schools in Nebraska are required to use multiple criteria for the identification of gifted students. Because this project was limited to serving students who qualify as Academically and/or Intellectually gifted, the following criteria were used:

1) Teacher/consultant referral based on behavioral characteristics (see following sheet).

2) Recommendation by past or present teacher, gifted consultant or psychologist.

3) Composite score of 96% or better in the areas of Reading, Math, Social Studies, Science, or Language Arts on a Standardized Achievement test.

   OR, ranking in the 98% or better on an individually administered IQ test (we used the WISC-R).

When a list of qualified students was compiled, informational letters and permission slips were sent to parents.

No child was admitted to the program without parental permission. And, no child was given an individual IQ test without parental consent.

ESURG IDENTIFIER

Student Name _____ Grade Level _____

School _____ Parent Name _____

Home Address _____ Phone(s) _____

1) BEHAVIORAL CHARACTERISTICS (may be completed by past or present teacher.) Please mark the categories which apply to the student and total the marks:

	CHARACTERISTICS	COMMENTS
____	1) Learns/Responds rapidly	
____	2) Large vocabulary	
____	3) Wide range of interests	
____	4) Seeks/Possesses in-depth knowledge	
____	5) Advanced skill levels	
____	6) Highly judgemental/Challenges rules	
____	7) Impatient with drill/Routine	
____	8) Good grades	
____	9) Insightful/Perceptive	
____	10) Unique/Original ideas	
____	TOTAL	

2) STATE AND FEDERAL GUIDELINES

Please supply all information which is currently available at your school.

A. Name of Achievement Test _____ Date Administered _____

Composite (Total) _____

Composites for Subtests: Reading _____ Math _____

Social Studies _____ Science _____

Language Arts _____

B. Name of Individual Psychological (IQ) Test _____

Score _____ Date Administered _____

3) TEACHER RECOMMENDATION

I recommend this student for participation in Project ESURG.

Signed _____ Position _____ Date _____

How are students informed about their acceptance into Project ESURG?

In order to place the "giftedness" issue into proper perspective, students are informed that they have qualified for ESURG classes because they have performed very well--either in school and on tests. Just as band is offered for good musicians, ESURG is offered for students of high scholastic ability.

Some schools choose to forego using the term "gifted"; others directly address the term. Most students were informed:

1) You have qualified as gifted because you (whichever is appropriate):

   - ranked above 96% on an achievement test.
   - scored above 98% on the test given to you by the school psychologist.

2) There are 3 other areas of giftedness--Leadership, Creativity, Visual and Performing Arts--which are not addressed by Project ESURG. This means that there are many other "gifted" students in the building; we just don't have a program for them yet....

3) Being identified for this program is like being born with a rich father: it is definitely nice, but it is now up to you to make the best of your situation.

PARENTAL INVOLVEMENT

SAMPLE Parent Permission Slip:

I hereby give my approval for _____
Name of Child

to be included in the _____
Name of Program(s)

I also give my permission to release information concerning the above named child, as required by law to the Nebraska State Department of Education.

_____ _____
Date Signature of Parent or Guardian

As educational services to gifted students are delivered at the local level, parental support becomes essential. In order to foster appropriate parental action, several services need to be offered by the gifted educator: formal inservice sessions and informal conferences.

The Project ESURG staff suggests that the following topics be included in a local district's long-range parental awareness plan:

1) Nature and Needs of the Gifted
   a. Definitions - national and district
   b. Rationale/philosophy
   c. Cognitive/emotional needs

2) Techniques/Strategies designed to meet cognitive/emotional needs
   a. Increased complexity/abstraction of curriculum
   b. Creativity: convergent/divergent thinking
   c. Problem-solving
   d. Research skills
   e. Intellectual risk-taking environment

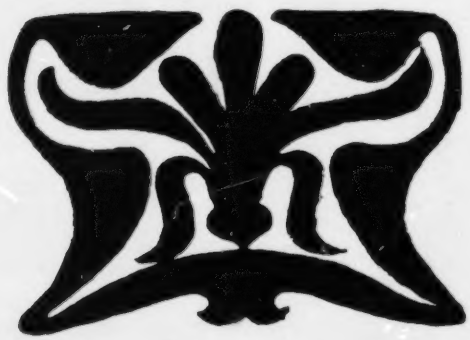
3) Description of your project
   a. How project is in accordance with needs of gifted students, laws, local guidelines.
   b. Identification procedures
   c. Grading/student assessment

4) The parent's role in the home
   a. Providing appropriate experiences
   b. Motivating
   c. Empathy with and support for gifted status
   d. Supporting excellence in performance
   e. Supporting school program for gifted

5) Overview of Gifted Education on a national and state level
   a. Examples of other programs, models
   b. Five areas of giftedness and appropriate models for each area
   c. Theories/research of major experts in the field
      1. Guilford-Meeker
      2. Terman
      3. Torrance
      4. Williams
      5. Others

6) Legislative status of Gifted Education
   a. National, state, school board levels
   b. Appropriate methods of support

7) Where to locate additional information
   a) Bibliographies
   b) Conferences - NE Association for Gifted, CEC, NAGC, etc.



Curriculum

CURRICULUM

Chapter 3

What makes a gifted program different than other school programs?

The curriculum, the psychological atmosphere, the abilities of the students are all different. There is more to a gifted program than just the development of new units. The goal of all education is to provide excellent learning opportunities for all students. The goal of Gifted Education is the provision of not only excellent but appropriate educational experiences for students of high ability.

Some Guidelines for Appropriate Differentiation include:

--High standards for student work.

--Student input into offerings, products, evaluation.

--Opportunities for individualization.

--Transmission of knowledge between various age groups.

--Emphasis on personal/social development.

--Truly inventive and experimental research.

--Accelerated pace.

--Increased depth, complexity of subject matter.

--Use of community resources.

--Simulation of professional/business-oriented working conditions.

--An atmosphere which fosters excellence but allows for experimentation and "trial and error".

--Teachers who act as advocates for gifted students.

--Teachers who are continually curious and excited about learning.

In general, successful gifted programs simulate the best in education and business. The assignments are real--they may actually involve the community or the academic community. The skills taught are broad-based and can be applied to various academic and community situations. The atmosphere is one of cooperation and a mutual exchange of ideas. Knowledge and technical skills are emphasized--but as tools for the attainment of further meaning, not as ends in themselves. Discussions are open-ended with emphasis on the development of rationale. Questioning is valued; research and experimentation rewarded.

How can small rural schools "enrich" curricular offerings for gifted students?

"Enrichment" refers to those curricular experiences made available to gifted students which increase the breadth and/or depth of study while holding the student in the same grade in school.

JARGON

Activities which increase the depth or complexity of a topic are classified as Vertical Enrichment.

Activities which broaden concepts by studying related materials are classified as Horizontal Enrichment.

Explore Some More ...

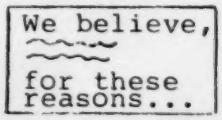
A PRACTICAL EXAMPLE:

If a group of students is studying

The "Verticals" might:

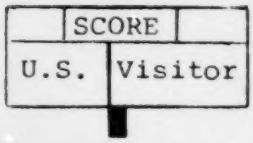
Compare/contrast incidents leading to 5 major wars in order to generalize about "major causes of American wars have been..."

OR:



Prepare a statement about the topic "Women and Combat: We Believe..."

OR:



Suggest a substitute for war which will accomplish the same objectives without loss of life.

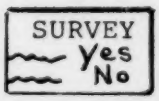
The "Horizontals" might:

Gather information about songs which have been written about American war to share with the class.

OR:

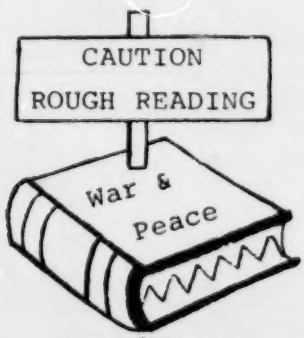
Compare the foods provided to soldiers in the Revolutionary War, Civil War, World War II and Viet Nam--make a timeline and a comparison chart.

OR:



Interview military veterans in the community to learn their opinions about "Veterans' Benefits - Quality and Quantity".

ESURG class offerings have included both types of enrichment. Because of the nature of "pull-out" courses themselves, both the topics of study and the activities offered within them have been supplementary to the school's "regular" offerings.



Project ESURG has developed some questions to ask while planning curriculum for gifted students:

--Does the unit offer components using:

- ☐ physical
- ☐ emotional
- ☐ intellectual

> abilities?

--Where does the student help make choices?

- ☐ topic selection
- ☐ method of reporting back
- ☐ evaluation criteria
- ☐ selection of sources
- ☐ type of product

--Does the unit include communication with:

- ☐ other age groups within the school
- ☐ community members
- ☐ experts in the field
- ☐ other (specify)

--Does the unit offer students the opportunity for increased:

- ☐ depth into a topic (narrowing focus on a certain issue)
- ☐ breadth of a topic (expanding the focus of the topic to include many aspects)

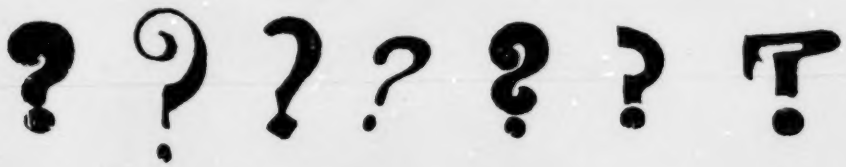
--Why have this topic and these activities been selected?

? What strategies can easily be used to insure that appropriate differentiation is occuring?

In demonstration classes, ESURG staff members selected several "core" strategies which could be easily adapted to various subjects and age groups.

Boundary Breakers

These are open-ended questions which can be used to start a unit, clarify an issue, close a unit. Depending on the design of the question, they can involve the physical, emotional and/or intellectual processes.



The rules for this technique are simple:

1) There are no "right" or "wrong" answers.

2) One person speaks at a time--(although all can perform motions or gestures at the same time).

3) Comments or questions are held until the end of the activity.

4) The length of a response is short (under 30 seconds).

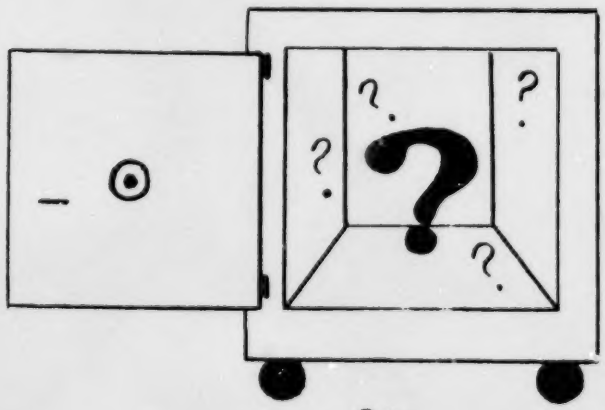
5) There is time for clarification, summarization, reinforcement of ideas at the end.

When beginning with this technique, the teacher needs to consider the:

--trust level of the group

--individual willingness to share experiences and opinions

Starting with "safe" questions and gradually building to introspective or highly evaluative questions is a wise plan.



Examples of boundary breakers associated with an airport unit.

Physical-using mime --(Teacher reads) "You are a plane in the sky--(action) suddenly, your pilot realizes you have gone past the airport.

(Action)

You slowly turn and gradually descend...(action) to a perfect landing (action).

--Comments are made concerning the elements of flight and the motions others noticed which highly resemble a plane.

Emotional-using words --"I would experience these feelings if I had to fly over a combat zone...."

Intellectual-using words --The most important person who can be found in an airport is _____ because....

Another commonly used strategy is the:

Guided Creative Experience

Guided Creative Experiences, also called "Encounters" or "Guided Fantasies" are activities in which students become actively involved in the convergent/divergent thinking process essential to creative development.

Guided Creative Experiences can be used in a variety of ways:

1) To develop convergent/divergent thinking skills.

2) To introduce a new unit.

3) As a substitute for large group brainstorming activities.

4) To help students monitor the length, appropriateness and/or loudness of their oral responses in class.

5) To promote intellectual risk-taking in the classroom.

6) As a "psychologically-safe" outlet for personal feelings.

7) As examples of exercises which include the physical, emotional and intellectual processes as essential parts.

The activity involved 4 phases:

1) Assignment of a Role. The student is asked to become something else and give answers from this new point of view.

2) Questions. The student gives an appropriate response to each of the following types of questions:

Identification of the New Role - Who or what the student has become. The student might develop a name or title to the assumed role.

Description - The student develops as complete a sensory description as possible of the item or person represented (movements are encouraged).

Emotional Involvement - The student describes the positive and/or negative aspects of being the new item.

Creation of New Dimensions - The student, in the new role, changes or adds physical or emotional characteristics.

Reaction to Crisis - The student predicts how the new item would react in a threatening situation.

Abstractions/Philosophical Implications - The student supplies a "message to the world" from the assumed point of view.

3) Summary. The leader asks participants to describe how they felt being something else and how they felt during the experience in general. The observers are also included in this phase, supplying their reaction to the activity.

4) Assignment of Related Activities. Any work assigned immediately immediately following this activity should be directly related to the content of the Guided Creative Experience. For example, students are asked to assume the role of a covered wagon in order to expand their concepts of "the frontier experience", "early transportation" or "alternatives to the automobile in the age of energy shortages".

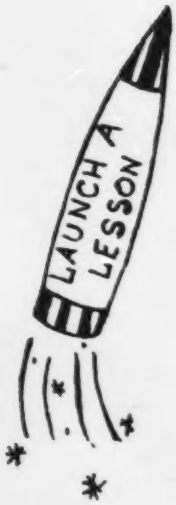
(Adapted from Dr. Dorothy Sisk: "Encounter Lessons: Activities to Stimulate Creativity and Positive Feelings of Worth".

SAMPLE

(To be used in conjunction with possible units on architecture; learning and physical environments in schools; archaeology, etc.)

Suggested number of participants 3-4 in front of class.

1) Instructions: "You have been selected to represent a concrete block located somewhere in this building. Please answer all questions from this new point of view."



2) Questions:

Identification - What is your name and where are you located in this building?

Description - Describe yourself as fully as possible using all 5 senses.

(NOTE: These two can be combined)

Emotional Involvement - A gifted child has been staring at you for the past 3 minutes. What makes you so fascinating to this gifted child?

Creation of New Dimensions - You have been entered in a contest. What would you change or add to yourself in order to win the Perfect Concrete Block Award?

Reaction to Crisis - There is a tornado warning for this area. Sirens are blaring and a large cloud has been sighted overhead. If it touches down, what will happen to you?

Abstraction/Philosophy - From your point of view, why are you proud to be a part of this particular building?

3) Summary: The leader should allow for summarization of the statements presented. The leader then asks participants questions such as:

--What emotions did you express in your answers? Or, "What feeling were you expressing when you said that you were crumbling at one edge"?

--What responses from others led you to change your answer at the last minute?

--Which of your answers pleased you the most because of its creative qualities?

Observers from the group are now encouraged to note interesting responses, ones they would have liked to share, things they learned, etc.

4) Assignment of Related Activities: Sample activities may include:

--Designing a needs assessment which addresses the psychological climate or physical environment within your building.

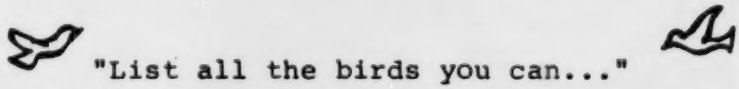
--Organizing students to decorate a hall.

--Developing a contest for student writers on a topic like "I'm a Part of This School".

--Constructing a unit for students which compares construction materials and costs between 2 area schools built at least 10 years apart.

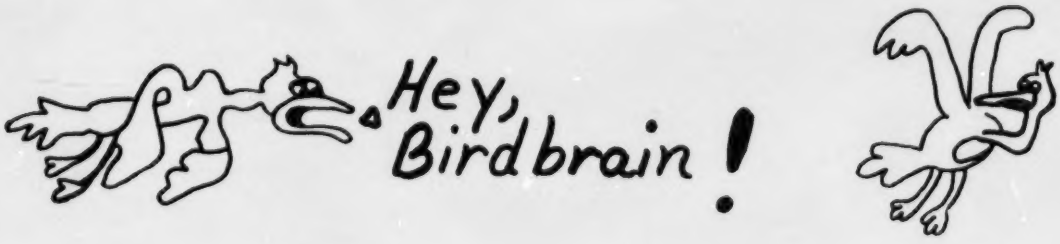
Brainstorming is a technique used to find ideas. It encourages the non-critical collection of as many ideas as possible in a short period of time. It is a beginning; it is random; its participants go through stages.

Given a question,



participants will list common, mundane birds: "Robin", "Crow", etc. Then list fancier or rarer types: "Albatross", "Bird of Paradise", etc.

There then comes a "Duh!" time of frustration when the brain seems to be stalled, leading to...A Silly STAGE.



Then follows the most productive or unique phase. (Your idea!)

A TIME MANAGEMENT HINT

If you are receiving mundane responses, either you haven't scheduled enough time or the students are unfamiliar with the topic.

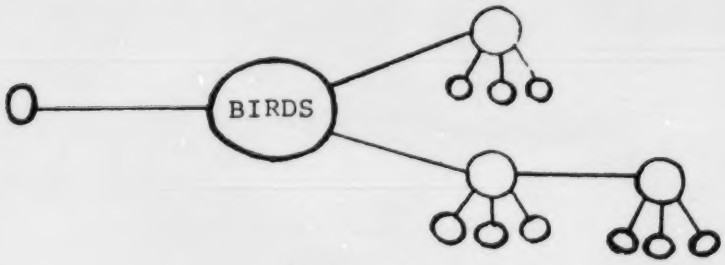
If you are receiving absurd, bizarre, irrelevant responses, your group has hit the "pre-creative" stage--allow at least 5 more minutes after the silly phase ends.

Once the brainstorming is over, WEBBING can begin.

This is the technique of mapping, clumping, clustering and classifying ideas which seem to be related. It is a step which comes between brainstorming and outlining (or sequencing).

If students were to WEB their bird lists, they might eventually form subgroups for Common Birds, Rare Birds, Literary-Related Birds, Knicknames Using Birds, etc.

The map can also show how 1 cluster is related to others.



Once these divisions are made, it becomes easier to sort out irrelevant material and make priorities. It is a good technique to help a student to narrow factual information gathered for an independent study.

Simulation Games

Simulation games incorporate the use of:

Critical Thinking
Role-Playing
Accepted Social Processes
→ To Solve a Real-Life Problem.

In order to "Win", students must be involved <u>actively</u> in procedural matters and the final product.

Most games involve...

--A clearcut goal ("Your team has won when...")

--A description of the setting (could include geographic, economic, political, emotional...)

--Characters
- famous people
- representatives of differing viewpoints
- representatives of various countries, organizations.

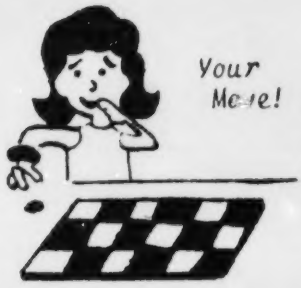
--Rules for scoring procedures and products

Team	Procedure	Product	Evaluation
		☑	☒
		☑	

--A systematic method of evaluation

Simulation games can be <u>simple</u>--lasting one class session--(simulating the differences between producing a product on an assembly line, vs. having each worker complete the entire product.) or <u>complex</u>--lasting several weeks--(simulating international diplomacy).

Students may wish to design and run a simulation game as part of a project. Teachers may want to use a simulation game to enrich or "spice up" a previously drab unit....



INDEPENDENT, PERSONALIZED STUDY

This strategy involves more than just "doing research" or "doing a project". It also involves work in Critical Thinking, Creativity and Self-Assessment.

Steps for ESURG Independent, Personalized Study include:

1) Identifying several areas of interest

2) Undergoing preliminary research and/or brainstorming/ webbing for at least 2 areas.

3) Selecting a topic and project

4) Making a contract with the teacher including:

   --Topic

   --Description of end product

   --Evaluative criteria

   --Deadlines (room for "tentative" and "actual")

   --Names or titles of possible evaluators

5) Listing sources

   --People

   --Places

   --Things

6) Proposals for "What to do if the project stalls..."

7) A log of activities

8) Presenting to appropriate audience

9) Evaluating.

This strategy is immensely POPULAR with some students but considered as TORTURE for others.

Management of a project-oriented unit such as this becomes easier when:

1) Students have a role in setting deadlines.

2) Topics can be changed, dropped, redefined (once, twice--probably no more than that).

3) Evaluation procedures are done jointly--in a realistic and cooperative atmosphere. (The best available judges should be used for each criterian; for example, the English teacher may judge the lyrics of a song; the music teacher the melody; the gifted consultant the originality, students the desirability of the song.)

Project ESURG conducted an assembly for all participants (students, teachers, parents and consultants) before embarking on the trail....

Judith S. Wooster, author of What to do for the Gifted Few (Buffalo, NY: D.O.K. Publishers, 1978), took the criteria established by the project, wrote and illustrated a pamphlet especially for our students and introduced the unit in person!

By getting instructions
"all at once",
from
"the horse's mouth",
the task becomes easier.

Critical Thinking

CRITICAL THINKING

Chapter 4

DEFINITION

Project ESURG defines Critical Thinking as the continuing process of:

SOLVING PROBLEMS

MAKING DECISIONS

PROBING FOR MEANING

TAKING A STAND

By

Gathering and examining data

Finding gaps in information and filling them

Forming concepts

Moving from "Concrete" to "Abstract"

Making generalizations

Putting things into perspective

PHILOSOPHY

Project ESURG supports the following ideas concerning the intellectual development of gifted students:

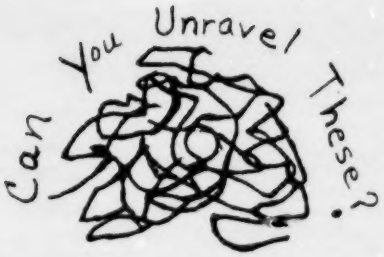
1) Educators have the obligation to provide many opportunities for students to develop thinking skills.

   Sometimes called "critical thinking", "problem-solving" or "decision-making", the process which needs to be offered includes (not necessarily in this order): 1) A complex problem; 2) Analysis; 3) Data-gathering; 4) Organization of information; 5) Criteria-setting; 6) Selecting several solutions; 7) Choice of a solution; and 8) Evaluation.

This means that a) knowledge is essential--but not a curricular end in itself; b) the "problem" issued to gifted students must be broad enough to allow for differing solutions; c) students must be encouraged to "back up" their solutions/opinions with data and a sound rationale.

2) Gifted students need educational experiences which foster continuing intellectual experimenting/curiosity/risk-taking.

This means that many assignments need to be open-ended, such as:



"Solve the Bermuda Triangle Mystery";

"Develop a 1 week menu for one person which is nutritionally balanced but includes no meat";

"Design a computer program which will enable us to understand the difference between solar and lunar eclipses".

3) An atmosphere of on-going learning must be maintained.

Students should become comfortable with the idea that "a solution to one problem is often the cause of others", thus causing the critical thinking process to start again. This helps students realize that their actions often effect others and also reinforces the need for constant reexamination of previous decisions.

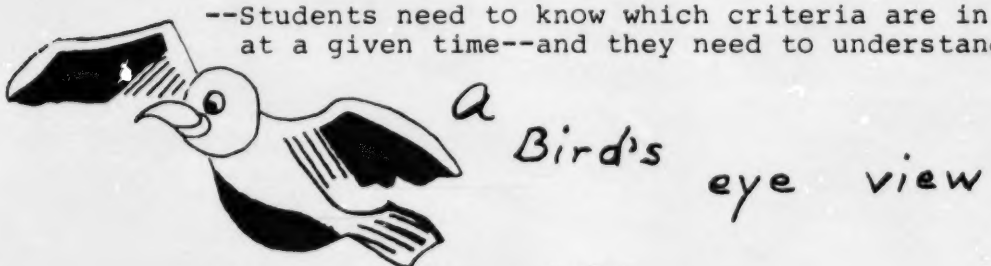
? When students are "thinking critically", how much emphasis should be placed upon other skills such as outlining, grammar, mathematical accuracy, etc?

Performance standards need to be set for each assignment. There are times when the formation of the idea or solution is paramount; there are times when the way the idea is presented becomes primary.

An easy way to determine which criteria should be used for judging a given assignment is to pretend that the work will be used by a major company. Students and teachers should ask something like: "What would your boss really need in this case?" Or "Which is more important at this stage: your organization of ideas or your grammar?"

Two Thoughts:

--Students need to know which criteria are in operation at a given time--and they need to understand why.



--Students can sometimes go to other students for help rather than always doing their own improvements. Where would many businesses be if the boss alone had to make the decisions, type the letters, draw the designs and record the bills?

? How can a students' Critical Thinking Skills be evaluated?

Both the process and the product can be scored. This procedure, although arbitrary in nature can be "standardized" by following some general rules:

--Inform the student of your criteria for judging.

--Encourage students to have involvement in the evaluation procedure.

--Use enough criteria so that the evaluation is complete but not so many that the student is overwhelmed.

Some criteria used to evaluate Critical Thinking skills among Project ESURG students include:

/ --Items teachers can observe.

	Not Observed		Somewhat Developed			Highly Developed	
Data Gathering.....	1	2	3	4	5	6	7

A. Uses Multiple Sources: Uses books, films, interviews, pamphlets, letters, pictures, etc.

B. Selects Pertinent Information: Uses valid sources, sets criteria, focuses on issues.

C. Accurately Records Information: Takes notes, outlines, webs, summarizes, uses visuals.

	Not Observed		Somewhat Developed			Highly Developed	
Problem Solving.....	1	2	3	4	5	6	7

A. Defines and Analyzes Problem: Examines total picture in relation to contributing factors; can state main and related problems.

B. Chooses Solution: Uses pertinent criteria; selects several solutions.

C. Implements: Makes plans and carries out solution.

D. Evaluates: Judges effectiveness of solution and process of problem solving.

	Not Observed		Somewhat Developed			Highly Developed	
Effective Communication	1	2	3	4	5	6	7

A. Speaks Effectively: Discusses and presents clearly and accurately.

B. Writes Clearly: Is effective in both factual and creative writing.

C. Communicates through the Arts: Uses art, music, dance and drama as vehicles of expression.

2--Items chosen by students and teacher reflecting standards for the product itself. The product or idea may be:

visually attractive
intellectually acceptable to an expert in the field
of marketable quality
free of typographical errors
etc.

A Comment About Evaluation:

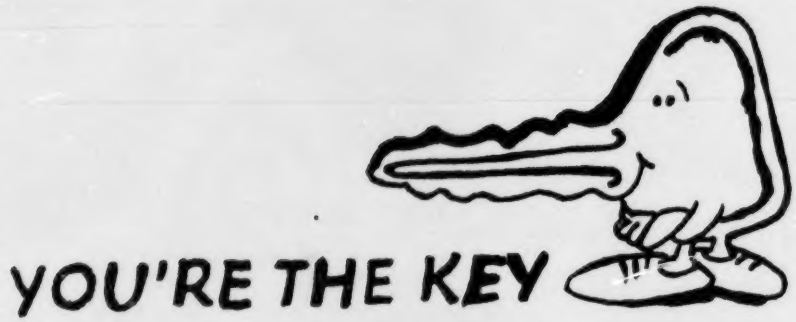
In a program which encourages experimentation, open-ended research and decision-making, it is important to allow for appropriate evaluative procedures. This means that...1) the evaluation of student work involves predetermined criteria which are understood by both the student and the scorer. 2) The evaluation should be done by someone who understands the topic and the process. In some cases the teacher may score the student on procedural aspects of the job and another student/teacher/parent/community expert may score the technical or informational aspects!

? How can a teacher insure that students are involved in activities that utilize Critical Thinking skills?

Good teaching really is good questioning: If you ask the right questions, you've got the curriculum under control.

Benjamin Bloom and Hilda Taba have supplied models which can help teachers organize questions and activities. Major book companies as well as those who offer "Creative Problem-Solving Strategies" can offer a workable structure for designing activities which foster critical thinking.

Personal Assessment



PERSONAL ASSESSMENT

Chapter 5

DEFINITION

Project ESURG defines Personal Assessment as the process of:

Realistically Assessing and Accepting > Strengths of self and others;

Striving to MAXIMIZE potential; setting goals; accepting personal responsibility; knowing when to help others and when to ask for help.

PHILOSOPHY

Students who are succeeding in this area understand their physical, intellectual and environmental (social, geographic) assets and liabilities and function without arrogance or embarrassment. They set educational and career goals which are in accordance with their aptitudes and interests and function in ways which allow for realization of their goals.

Students who have difficulty in this area tend to either: 1) use their "giftedness" as an excuse for inappropriate behavior ("No one likes me because I'm smarter than they are." "I don't have to do any drill because I'm gifted in math.") or, 2) tend to understate or extinguish their abilities in order to become average ("I want to be just like my friends and not be known as a weirdo.")

When analyzing the behaviors and attitudes associated with the Personal Assessment category, the Project has arbitrarily set a rule for classroom observation: if the student manifests positive behaviors over fifty percent of the time, the student ranks as satisfactory (above a '4' on a 7 point scale).

Some examples of activities in which a teacher may observe student behaviors relating to Personal Assessment include:

Individual

--Conferences about aptitude or achievement test results
--Independent study projects
--Career awareness activities
--Introspective writings or conversations
--Contracts: goal-setting and fulfillment
--Interviews

Individual vis a vis Group

--Boundary Breakers
--Guided Creative Experience
--Creative Dramatics
--Oral Reports, Panels
--Group Decision-Making Tasks
--Simulations

? What can be done to help students who are having difficulty with self-acceptance?

This problem is a highly complex one for it focuses on personal emotions, individual abilities and the total environment surrounding the situation. It is unlikely that THE answer can be found. However, some suggestions can be made:

1) Try to analyze each individual situation as fully as possible before making decisions.

Examples: A student who is having social problems in school may be accepted elsewhere.

--Home and school expectations may be in conflict.

--The child may perceive your expectations to be in conflict with those of the other teachers or the total school climate.

2) Try some things!

The teacher needs to stretch the "underachiever" and inhibit the "reckless risk taker" a little. While the student is in your classroom, you have the right to expect performance and positive behaviors.

Activities such as Boundary Breakers and Guided Creative Experiences help to limit the talkative and encourage the reluctant student. They also provide a "safety zone" so that the teacher can "read" attitudes without having to ask students directly to share them.

3) Share information concerning your personal assets and liabilities with students.

In class, join in the activities--and show your work. In private, chat with individuals--share comments such as: "I can guess how you're feeling--I used to feel that way too--want to hear?" Or, "I know this is difficult for you--and I appreciate your effort. It says a lot about your character. I respect you."

4) Accept responsibility for only your part of the situation.

This means that you do have some responsibility for the student.

You are responsible for taking some actions to remedy the situation while the student is a part of your program; you do not have the full responsibility, however. In many cases, a joint effort among student, parent, educators and professional counselors may be necessary. Find a balance that is both professionally and personally satisfactory.

Another thought:

Growth doesn't occur among the comfortable.

Students and teachers need challenges--and rewards for meeting them!

? What should be done to help the student whose interests and abilities in an area are far superior to anyone in the school or community?

This is a positive challenge!

An exploration of other alternatives might include:

--an ERIC computer search of other sources (plus the purchasing of microfische or Xerox printouts).

--phonecalls to experts asking for advice.

--independent study designed by a university professor for the student.

--arranging a weekend visit to a tutor.

--writing to the "Action Editor" of the local paper asking for help.

--examining the possibility of early entrance into a university course.

--contacting businesses or organizations which offer training in the field.

? What if a child absolutely refuses to produce in class, either as an individual or a group member?

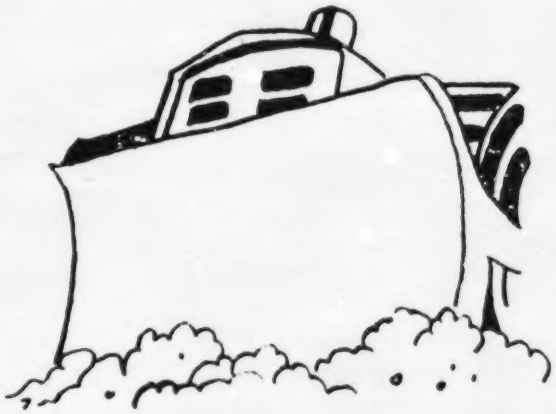
There are differences of opinion among the experts on this issue. Some (such as Joseph Renzulli and Julian Stanley) feel that motivation should be a major factor in the selection of students for a gifted program. Others (such as Dorothy Sisk) feel that affective strategies incorporated into the program will help students build the confidence needed for producing work.

Project ESURG supports the idea that both teacher and student need to assume appropriate responsibilities concerning the tasks assigned and completed within the program. Within the the curricular design itself are strategies which foster positive self-image and encouragement for intellectual risk-taking.

Students however, need to fulfill responsibilities for assigned work--especially when students have had an active role in a portion of the decisions concerning the assignment; i.e., selection of a topic, evaluative criteria and the method of presentation. It is possible that individual student/teacher conferences, parent involvement, isolation from the group while completing an assignment or temporary exclusion from the program are all viable solutions to motivational programs.

A NOTE CONCERNING THE PSYCHOLOGICAL CLIMATE:

Open communication and an environment which is supportive of gifted students is strongly encouraged. In managing motivational situations, the teacher needs to establish a balance between the desire to a) let the student assume total control and b) make decisions for the student. Also, the teacher needs to ENJOY working with gifted students; UNDERSTAND the nature and needs of gifted students; ACT AS AN ADVOCATE for gifted students in school and community settings.



? How do you help students who are "perfectionists", who struggle and suffer with every task?

Chances are you'll be able to change the students' behavior concerning a task but not how they feel about the product. One suggestion is to discuss the level of quality desired per unit of time:

> "What's most important about a rough draft?" --The ideas and general structure.
>
> "Should this be more important than punctuation in the rough draft?" --Yes.
>
> "Can you cross out mistakes in a rough draft?" --Yes.

Helping the student understand expectations--and possibly simulating a newsroom with its deadlines and desire for accuracy--can help. (However, some students are so perfection-oriented that they will write the equivalent of a final draft and neatly--and intentionally--cross out a few words just to please the teacher...!)

What about the "Overachiever"?

Project ESURG supports the idea that no one can achieve more than their ability allows. (A kind of overachievement can occur if achievement testing is inaccurate....) However, a student can be overextended and trying to achieve in too many areas at once. This can lead to stress, illness, "burn out" and the manifestation of a variety of other coping devices.

Realistic assessment needs to be encouraged for the student. Priority-setting and time-management schedules help. Also, a review of study techniques and topics such as speed reading methods can be used--if the added efficiency doesn't encourage the student to do even more....

A Final Thought:

Gifted students tend to be very perceptive. They distrust "phony" support; they suffer over catastrophic world events; they can spot incompetency; they can detect how a teacher "really feels about them." A teacher who is sincere and admits to having human frailties will endure in a gifted program. The idea "I truly care about you all of the time--even though I may occasionally dislike your behavior..." is a good one.

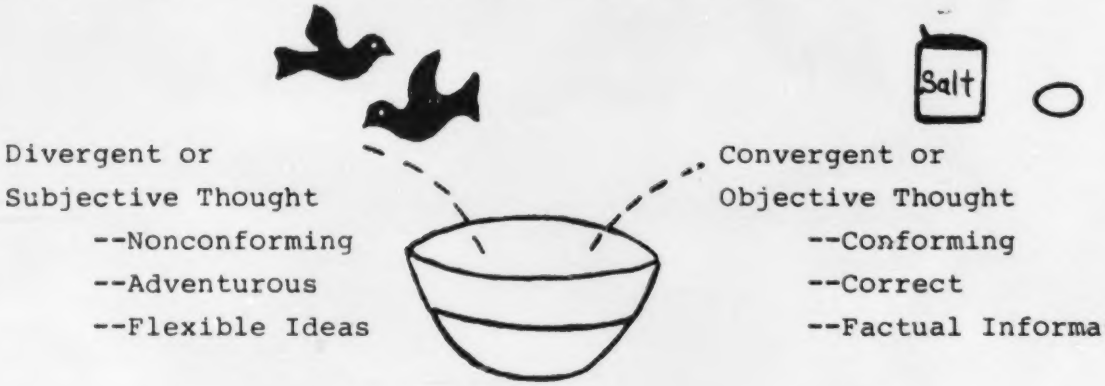
Creative Production

CREATIVE PRODUCTION

Chapter 6

DEFINITION

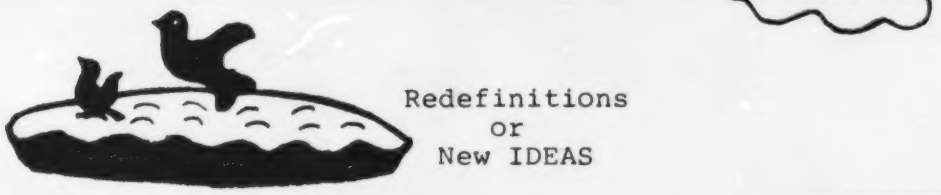
Project ESURG defines Creative Production as the process of MIXING:



Divergent or
Subjective Thought
--Nonconforming
--Adventurous
--Flexible Ideas

Convergent or
Objective Thought
--Conforming
--Correct
--Factual Information

TO FORM



Redefinitions
or
New IDEAS

When a creative challenge is issued, many responses are received. These can be classified as...

DEVELOPMENTAL

Ideas new to a person but not to the general population. (The exciting mental links which are common to those encountering similar experiences; conclusions drawn by a student which are personally exciting but seem obvious to those who have gone before.)

ENRICHING

Ideas new to the general population which enrich our lives. (New products, useful metaphors, plays, musical trends, educational innovations, etc.)

THE BIG "C"

Ideas which become "Universal"; set new standards; start a new discipline. (Works by Einstein, Picasso, Newton, Da Vinci, etc.)

Most Creative Experiences within a school setting involve the developmental and enriching types of production. Students who are considered as "highly creative" tend to operate in zones which lead to more "enriching" ideas; i.e. their products lead others to say "Oh, of course!" Or, "How true!" Or, "How different--but great!"

Some, with societal encouragement, may head into THE BIG "C"....

PHILOSOPHY

Two questions are often asked concerning Creative **Production:**

> "Are all people creative?" And, "If so, to what extent can creative skills be taught?"

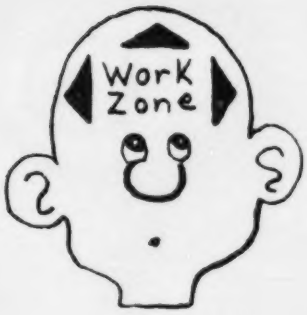
Project ESURG supports the idea that most people have creative ability.

Society defines those areas in which its people will succeed. Political, geographic, economic, climatic and other factors all may have an influence on what skills or talents are well-rewarded.

On a smaller scale, if a community or a school system rewards only "Developmental" creative production, it is likely that highly creative students will: a) produce at higher levels but not share their ideas; b) create highly negative or disruptive products; c) tune out.

Therefore...Project ESURG supports the idea that encouragement is the most inportant factor in fostering creative production. When Creative SKILLS have been taught, many highly creative students have tended to become reinforced for things they've already done naturally. In other students, the internalization of Creative Production skills had led to the manifestation of technically strong "developmental" responses. (The student was able to perform the steps with rather ordinary answers.)

Creative skills can be used in a variety of situations. There are many models from which to choose; but most involve:



A Challenge

+

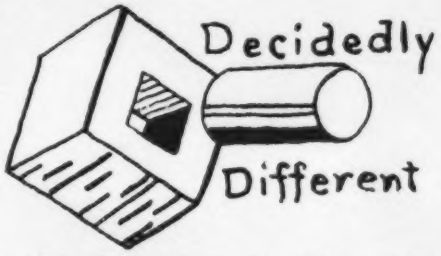
Divergent/Convergent Thinking

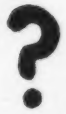
↓

Production

Practice with Creative Production skills is important, for the assignments themselves reward and further motivate creative students.

When desiring concrete and representational products, the divergent thinking skills of Fluency, Flexibility, Originality and Elaboration seem to help students. When abstract products are desired, these 4 skills may be supplemented with some additional steps, such as Parnes' Creative Problem-Solving Method or Torrances' Future Problem Solving Technique. These encourage convergent-divergent thinking and offer criteria for resolving complex issues.





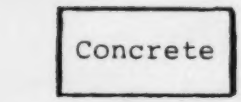
Is a Creative Child Creative in Many Areas?

Sometimes.

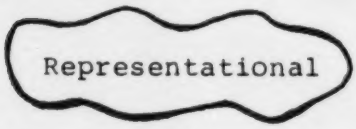
As is true of other talent areas, some people do better in some areas of creative production than others. If a school identifies students based upon behavioral characteristics common to creative people, there is no guarantee that every "highly creative" student will perform creatively in music, writing, photography or other areas.

Highly creative students will demonstrate their abilities in areas which hold personal meaning and are interesting to them for a long period of time.

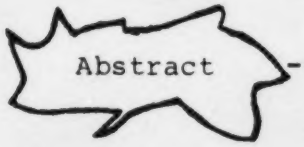
Creative products can be:



--Objects, Actual Events



--Photos, Models, Films, etc.



--Codes, Logos, Symbols

Some students will favor one method of producing and will write and write and write. Others will jump the concrete-representations-abstract zones and produce codes, mime, pottery, slides and create a happening for others--all in one assignment.

Creative Production involves a combination of physical, emotional and intellectual processes. The Teaching of Creative Production skills must allow for these--plus more!

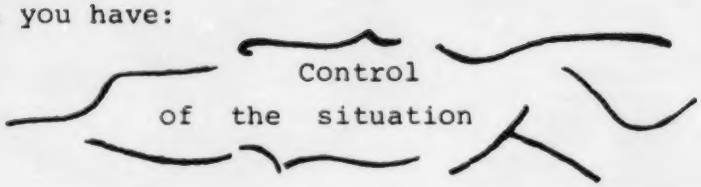
Suppose that you have been asked to create a title for a piece of abstract sculpture in order to win a contest:

Physical - You observe the work--using your senses (it includes a growing plant, a feather, round soft shapes, a music box...).

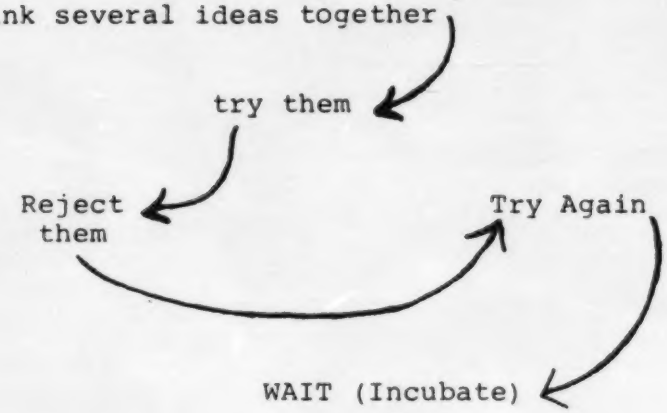
Emotional - You develop some ideas about it--you feel that it's positive--showing love perhaps.

You gather information about the artist, other people's ideas, the style of art, the intellectual political or economic climate which it may address, etc.

Once you feel you have:



You may link several ideas together



And

Create a title.

?

What about time?

The process may take a few minutes, several days or a longer period of time.

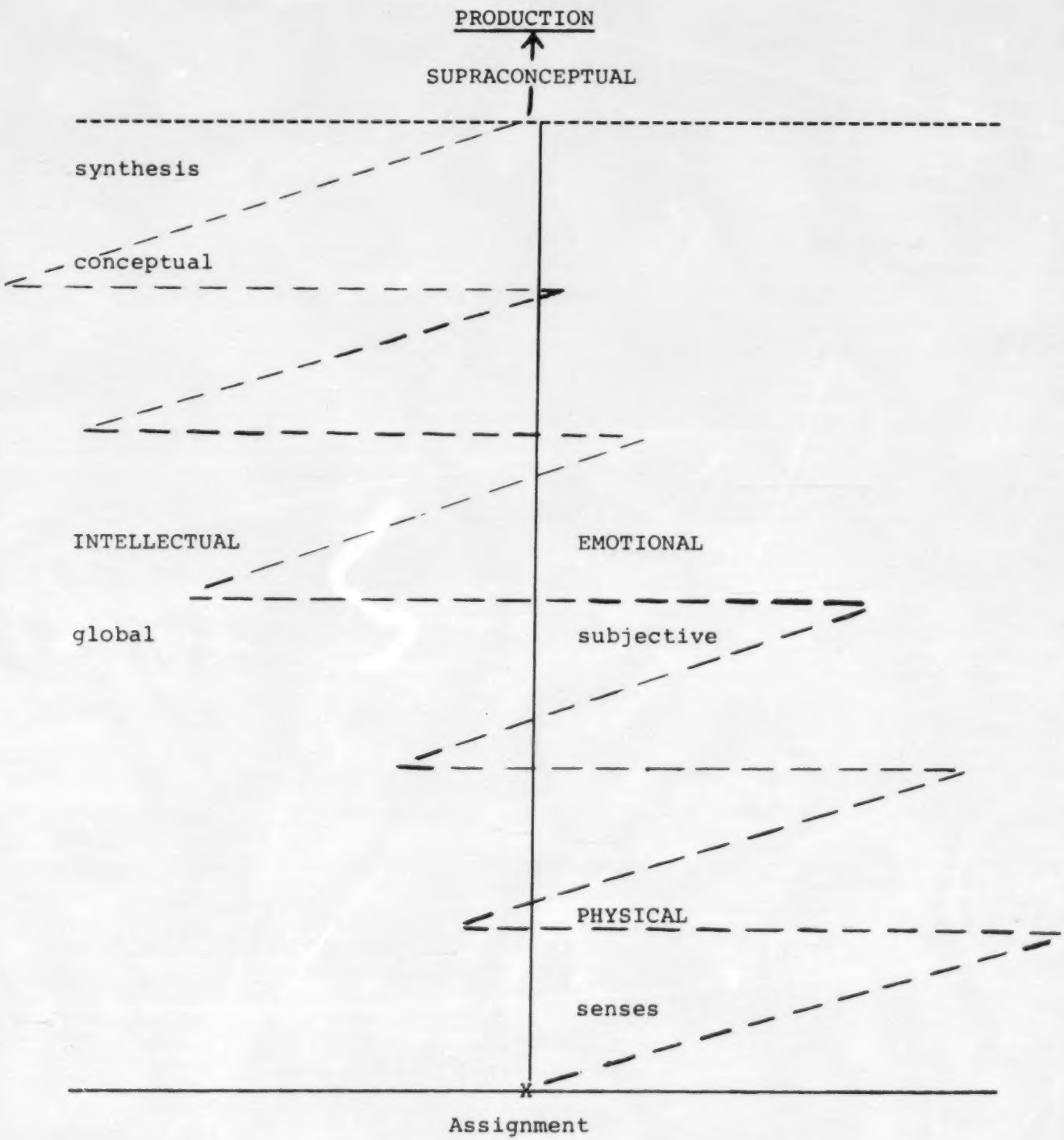
For students, the importance of the task, the complexity of the job, personal interest in the topic and expectations (standards of excellence) all influence the amount of time used.

Often the student who does everything at the last minute has in fact been processing ideas in a more meaningful way than a daily schedule of highly visible activity would allow.

During a creative independent study unit, ESURG students were asked to log a month's work time. Almost all initially logged at least one time period per day which was devoted to the project. When questioned further, students admitted that they had done this because they assumed that teachers expected daily work. (They had been traditionally rewarded for highly visible daily work.) In reality, the students had worked in sporadic phases

They had jumped from thought to action; from emotion to senses; from concepts to feelings. This period of "disequilibrium" or "creative disorder" led to a period of "withdrawal" or "incubation" and then on to "production" or "creation".

Project ESURG Planning Zones

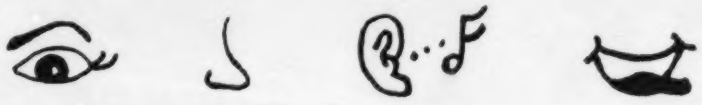


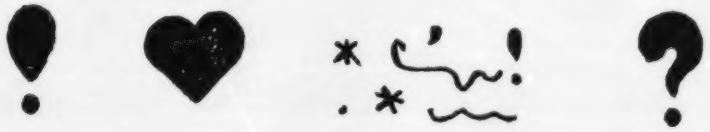
When planning for creative experiences in your classroom, allow for approximately one/half of the time to be spent in each zone.

Bob Samples in The Metaphoric Mind notes two ideas concerning this process: 1) guilt is the most inhibiting factor in the creative process; and 2) the closer one gets to the creation, the more one is operating in the intellectual zone. These ideas are linked. It shows that the emotions are an important element and must be included in the process. Furthermore, the senses feed the emotions. Together, the senses and emotions flavor the intellect.

When a person combines sensations from all 3 zones, usually in an incubation stage, then _____ Creative Production occurs.

When planning creative classroom activities, time needs to be allotted for:

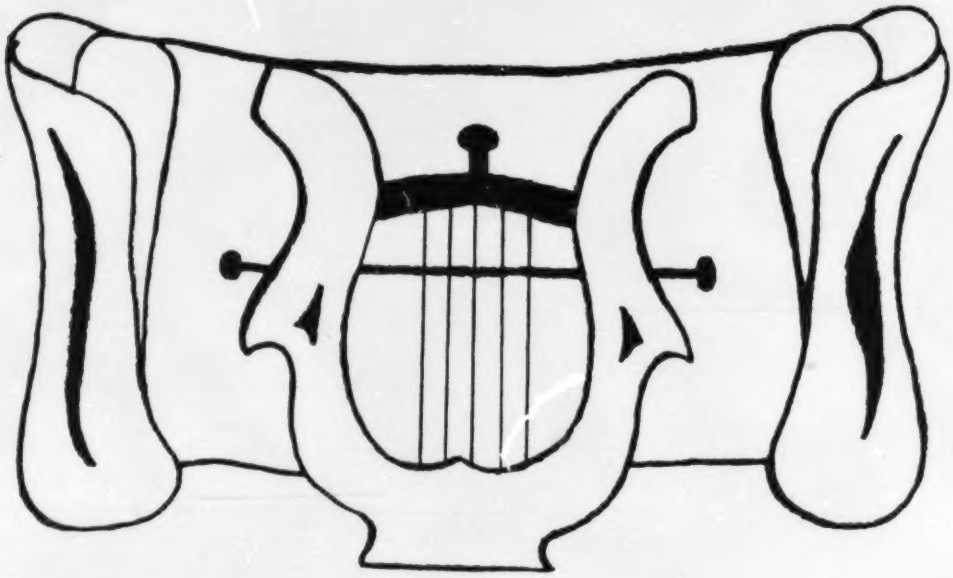
the senses 

the emotions 

and the intellectual processes.

Topic - Song Writing

SAMPLE:



Physical - How would a song taste? Is it rough, smooth?

Emotional - This music makes me feel _____. It reminds me of a time when _____.

Intellectual - A song is defined as _____. It's parts are _____.

Control

Supraconceptual - Creative Production.

By next week, compose a melody which describes your favorite place. Others will try to guess from the melody what you had in mind.

Project ESURG: Things to Look for in Creative Products

Name _____ Date _____

School _____ Evaluator _____

Type of product: ____ Concrete - Actual events, objects

____ Representational - Photos, models, films, diagrams

____ Abstract - Codes, logos, words, mime, symbols

Please issue 1 point for each characteristic demonstrated in the student's product.

NOTE: Not all characteristics fit each assignment. As the assignment is given, students and teacher should agree on which characteristics will be stressed for the product and the total number of points which can be obtained.

Convergent	Divergent
____ factual	____ symbolic
____ sequential/hierarchial	____ vivid/imagery
____ completed	____ redefining
____ realistic/pragmatic	____ unusual viewpoint
____ organized	____ humorous/adventurous
____ accurate	____ fluent/rapid/verbal
____ clear/simply stated	____ flexible/combination of ideas
____ analytic/logical	____ original/unique
____ appropriate	____ sensitive/emotional
____ complex	____ elaborate
	____ risk-taking

OPTIONAL: Process - During the production phase, the student demonstrated...

____ enjoyment/interest

____ perseverance

____ task-commitment

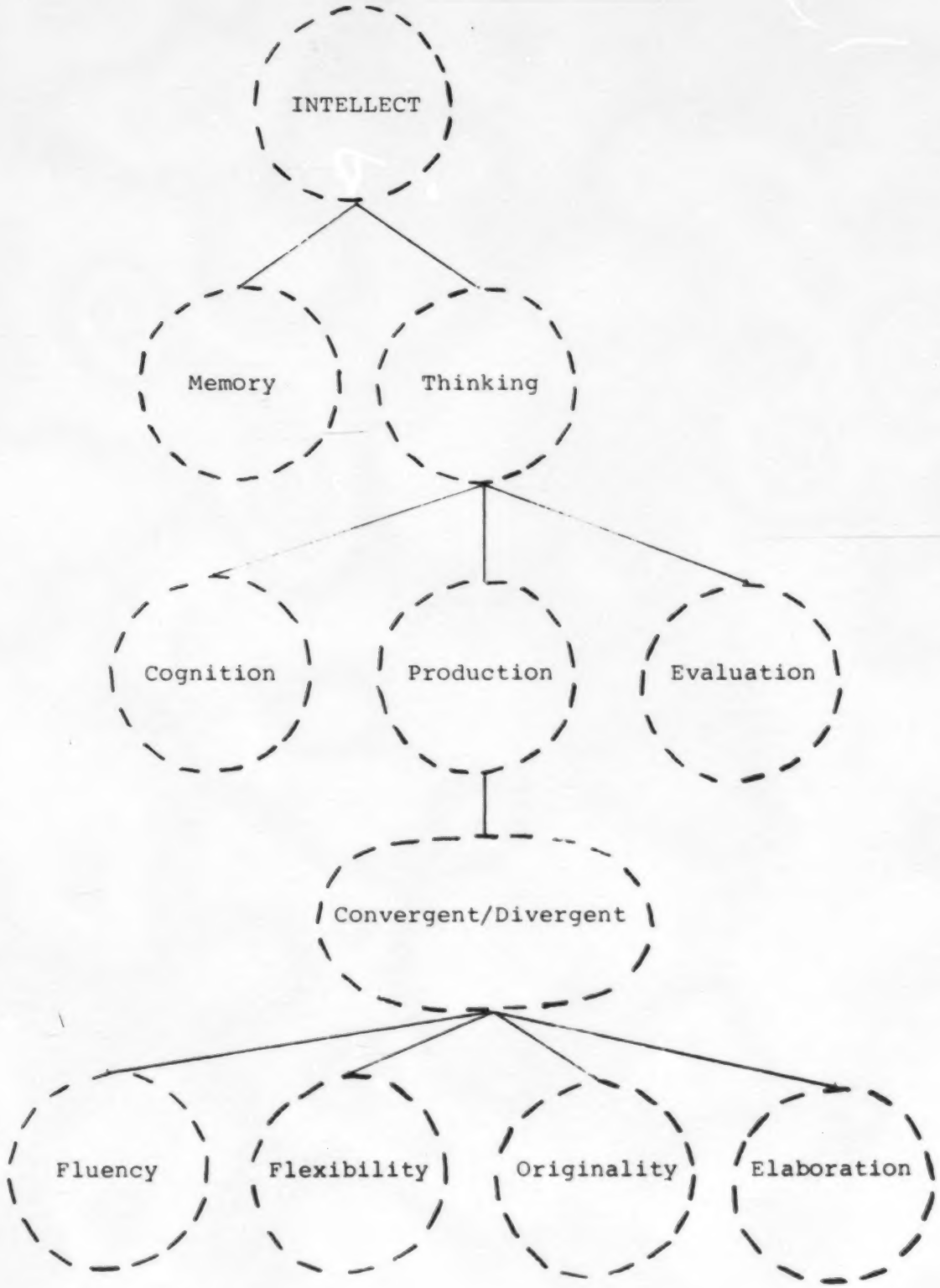
____ spontaneity

____ concentration

Score _____/_____ COMMENTS:

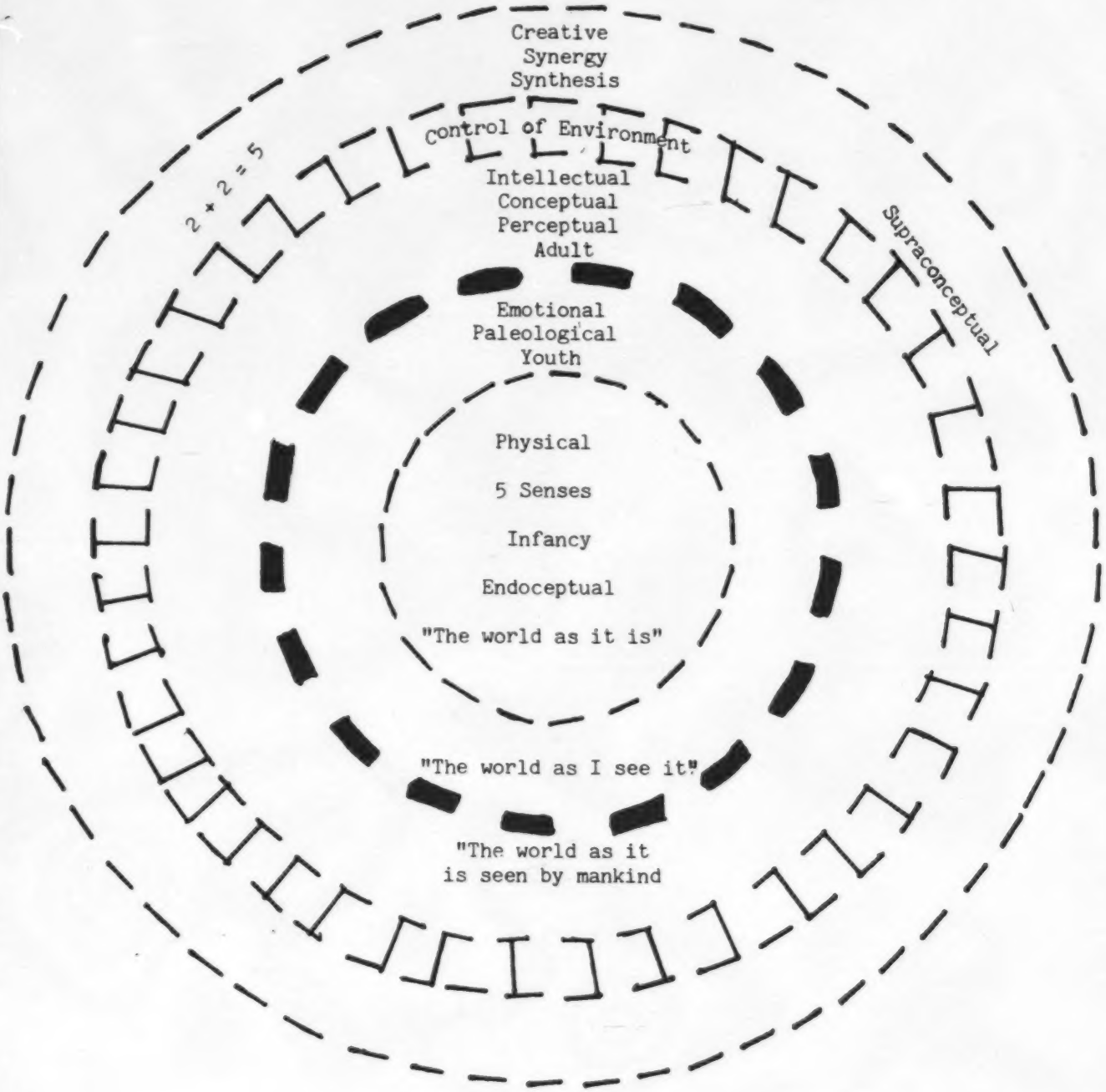
Total Points / # Maximum Points

Relationship of Divergent Thinking to Other Thought Processes
(Based on Guilford's Model)



Project ESURG

The Creative Process



Adapted from Gowan; Samples; Arieti